

**COMPLETE STATEMENT OF**  
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**U.S. ARMY CORPS OF ENGINEERS**  
**DEPARTMENT OF THE ARMY**

**BEFORE THE**

**Subcommittee on Energy and Water Appropriations**  
**HOUSE OF REPRESENTATIVES**

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Introduction

Mr. Chairman and distinguished members of the subcommittee, I am Lieutenant General Carl A. Strock, Chief of Engineers. I am honored to be testifying before your subcommittee today, along with the Assistant Secretary of the Army (Civil Works), the Honorable John Paul Woodley, Jr., on the United States Army Corps of Engineers' activities related to Hurricane Katrina. My testimony today will provide a brief background and update the Subcommittee on progress made to date on relief efforts by the Corps of Engineers in support of FEMA's response and recovery mission, as well as an update on the status of the levees around the greater New Orleans area and the principal commercial navigation channels.

Background

The Corps of Engineers responds in three ways to natural disasters. First, we act as part of the Federal response under the direction of the Federal Emergency Management Agency. Second, we act under our own civil works authorities, which in the area impacted by Katrina involve principally our flood and storm damage reduction and commercial navigation missions. Finally, we provide engineering assistance as needed in support of the Department of Defense military forces who are responding to the disaster. In all cases, our priorities are to support efforts to save lives and find people, to sustain lives through provision of water and shelter, and to set conditions for

recovery, such as debris removal and cleanup, and restoring critical infrastructure and navigation.

### Support of FEMA

In support of FEMA and the National Response Plan, we are responsible for Emergency Support Function 3 (ESF-3), one of 15 Emergency Support Functions that come together prior to, and during a disaster. Under ESF-3, we have a mission to provide ice, water, temporary power, and debris removal. For these pre-scripted missions, we have standing contracts and we move these capabilities forward to major mobilization sites prior to landfall. From there, we have operational support areas that are throughout the disaster area, where commodities flow when they are needed.

We also provide temporary roofing and debris removal. In the past, we have been requested and had responsibility for the temporary housing mission. In this case, FEMA has elected to stand up a task force, the Housing Area Command, which is under the direction of FEMA. We will continue to support this with technical expertise and execution, but FEMA is handling the temporary housing mission now. We also provide other technical assistance at the request of FEMA on an as-needed basis.

Each of these missions is performed by groups of Corps of Engineers employees from around the globe who are trained and ready prior to the advent of a disaster and know that when a disaster occurs, they will be called in to respond. We have them standing by in various stages of readiness.

### Corps of Engineers' Inherent Mission Responsibilities

In addition to our support of the broader response effort that FEMA coordinates, the Corps of Engineers has its own responsibilities in flood and storm damage reduction and commercial navigation. For example, we conduct surveys of all the structures in the area, both navigation and flood and storm damage reduction, and then begin to make repairs. We are also working under our PL 84-99 authority with the affected parishes to repair levee systems that were damaged during the event. Under the flood and storm damage reduction authorities that govern the civil works program, we repair Corps owned structures and some non-Corps owned structures.

### Status of our Ongoing Efforts in the Disaster Area

Volunteers from several federal agencies have joined the Corps team in providing support to FEMA. We are working closely with the Bureau of Reclamation, the Environmental Protection Agency, the U.S. Coast Guard and the Army Material Command. In addition, Germany and the Netherlands have provided equipment and personnel to assist in the hurricane recovery. Currently we have nearly 2,900 Corps employees deployed in the affected areas. We estimate that meeting our assignments to date for Katrina from FEMA will cost about \$3 billion. We have transferred \$64 million from other Corps accounts to our Flood Control and Coastal Emergencies

program since Hurricane Katrina and also have received \$200 million in supplemental appropriations for this program. We have also received an additional \$200 million in supplemental appropriations for our operation and maintenance program, which will fund repairs to water resources projects owned and operated by the Corps that were damaged by Hurricane Katrina, both flood and storm damage reduction projects and Federal commercial navigation harbors and channels.

To date, more than 4,200 truckloads of water and 4,400 truckloads of ice have been delivered. We have assessed 822 generators, have installed 241 generators, and have de-installed 105 generators because they were no longer needed. We have installed more than 7,000 temporary roofs and more than 25,900 Right of Entry forms have been submitted to the Corps by people affected by the disaster. We estimate that roughly 51,000 roofs will need temporary roofing installed. Finally, we have removed almost 2.3 million cubic yards of debris to date.

The Corps of Engineers is performing a detailed assessment of the levee system. The 17<sup>th</sup> Street and London Canal levees have been closed and repaired. The levees in Plaquemines Parish are being repaired now. There were a total of nine levee breaks, including the deliberate levee breaks we made to assist in the un-watering of New Orleans. It is important that leaders and residents understand that there is risk to life and property in re-entering flooded areas until additional emergency levee repairs have been made. Pumps that are designed to remove water must also be returned to an operational status. State and local leaders are advised to ensure effective warning and evacuation plans are in place as long as protection levels are diminished. State and local leaders will be kept informed as assessments are complete and repairs are made.

Prior to Hurricane Rita, we were making steady progress on pumping out floodwaters from the city of New Orleans. The arrival of Hurricane Rita and the subsequent flooding of parts of the New Orleans area will impact the schedules for un-watering some areas. As soon as the situation is safe enough to continue full work, the un-watering team will continue to un-water as quickly as possible, but at this point, predictions are difficult until more information is known about the extent of new flooding and pump capacity. The number of pumps that are operational at any given time is continually changing. Work continues at the overtopped breach sites along the Inner Harbor Navigation Canal. Water levels in the canal have dropped more than 4 feet since the overtopping on Friday and water has stopped flowing over the east and west side breach areas. It is expected to take about one week to un-water the 9th Ward and St. Bernard Parish once pumping operations begin later this week.

The Mississippi River is now open for navigation all the way to the Head of Passes. The only part of the river that is operating under any restrictions is from the main stem of the Mississippi River channel through the Southwest Pass out into the Gulf. That section is limited to daylight traffic, due to the lack of aids to navigation, just as it was prior to Hurricane Rita. The Gulf Intracoastal Waterway (GIWW) is open from Morgan City East and Houston west. It is closed West of Wax Lake in the Morgan City area of responsibility until further notice. The Calcasieu and Leland Bowman Locks were

mechanically opened to drain the basin. Getting Calcasieu and Leland Bowman operational is a priority of the navigation industry. Freshwater Bayou Lock is closed and Harvey Lock is closed until canal water level drops below 3.5 feet and water can be pumped from the canal gates machinery room. Algiers Lock is operating. Obstructions in the channel have been removed. The U.S. Coast Guard has opened the Inner Harbor Navigation Canal (IHNC) with vessels restricted to 110ft wide by 18ft draft due to bridge closures and sunken barges. The IHNC was briefly closed following Rita but now has been reopened, subject to the same restrictions. The Mississippi River Gulf Outlet (MRGO) is closed to deep draft vessels. The inland portion will serve as an alternative route to the GIWW due to closure of IHNC for shallow draft vessels deeper than 18 feet. Critical aids to navigation are in place for this portion of the MRGO. Our preliminary surveys indicate a controlling depth of 23 feet and the Captain of the Port of New Orleans has declared MRGO available to draft of 23 feet. Port Fourchon sustained significant damage, but is operating to a limited extent. The U.S. Coast Guard Captain of the Port has opened the Atchafalaya River from Mile 0 to the Gulf. Tiger Pass is shoaled to less than 6 feet. This channel, authorized to 14 feet, provides a shorter route for vessels traveling to the west from the Mississippi River near the mouth and is primarily used by fishing and supply vessels. We are preparing a contract to dredge the channel. The Port of Morgan City has experienced some shoaling and dredging is being scheduled.

We are working closely with local, state, and federal experts on monitoring the water quality as the water is pumped out of the City. As we get to the final amounts of water, we may encounter more concentrated levels of contaminants that will require special attention and handling. It is important to note that the un-watering effort will remove most, but not all the water. The remaining isolated pockets of water should not hamper recovery efforts such as debris removal, structural assessments and restoration of critical services.

#### Our future role in the disaster area

At this time, the Corps is focused on disaster relief and recovery, including un-watering New Orleans and surrounding areas. We are also currently implementing a plan to reconstitute our New Orleans District office, which has been closed since the Hurricane. I am happy to report that all 1,229 employees of the District have been accounted for.

This concludes my statement. Again, I appreciate the opportunity to testify today. I would be pleased to answer any questions you may have.